UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 W. JACKSON BOULEVARD
CHICAGO, IL 60604

COMPLIANCE EVALUATION INSPECTION REPORT

INSTALLATION NAME:	Solutia, Inc. WG Krummrich Plant
U.S. EPA ID No.:	ILD000802702
LOCATION ADDRESS:	500 Monsanto Avenue Sauget, IL 62206
NAICS CODE:	325188 - All Other Basic Inorganic Chemical Manufacturing 325192 - Cyclic Crude and Intermediate Manufacturing
DATE OF INSPECTION:	August 23, 2006
U.S. EPA INSPECTOR:	Todd Brown

PREPARED BY: Todd Brown — 09/14/06
Todd C. Brown
Environmental Scientist
Date

REVIEWED BY: Lorna M. Jereza — 9/20/06
Lorna M. Jereza, Chief
Compliance Section 1
Enforcement and Compliance Assurance Branch
Date

I. Purpose of Inspection

The purpose of this inspection was to conduct an unannounced Compliance Evaluation Inspection (CEI) at Solutia Inc., WG Krummrich Plant (Solutia) to determine its compliance with the Resource Conservation and Recovery Act (RCRA), with respect to Solutia's management of hazardous waste.

II. Plant Description/Back Ground

Solutia is located at 500 Monsanto Avenue, in Sauget, Illinois. Currently, Solutia manufactures rubber intermediates, phosphorus pentasulfide, and ACL powder (a chlorinating compound for swimming pools). Though the rubber intermediate and ACL manufacturing operations are performed by Solutia employees, the operations are performed on behalf of Flexsys and Oxidental Chemical Company, respectively.

Historically, Solutia had manufactured a variety of chemical compounds at this plant, including various acids, zinc chloride, phenol, chlorobenzenes, nitrated organic chemicals, chlorophenols, and phosphorus compounds. The chlorobenzene manufacturing process was in operation as recently as 2004.

Currently, Solutia is a large quantity generator (LQG) of hazardous waste. The main hazardous waste streams generated by Solutia are an organic waste stream containing ketones, and empty bags that had contained paranitroanaline. The ketone waste stream is stored in an outdoor hazardous waste storage tank, and is generated from the rubber intermediate manufacturing process. The empty paranitroanaline bags are stored in roll-off boxes. Paranitroanaline is used as an ingredient in the rubber intermediate manufacturing process.

Other hazardous waste streams generated by Solutia include used aerosol cans and samples of phosphorus pentasulfide. Used oil is also generated at the plant.

III. Opening Conference

I arrived at Solutia at approximately 8:25 A.M. After checking in at the reception desk, and reviewing Solutia's safety policy for visitors, I held an opening conference with Tom Talbot, ESH and Security Lead, and David Fulbright, Environmental Manager. I presented Mr. Fulbright with my U.S. EPA credentials prior to holding the opening conference.

The opening conference began at approximately 8:50 A.M. At the beginning of the conference, I presented Messrs. Fulbright and Talbot with the EPA Small Business Handout, a list of the Pollution Prevention Contacts in Region 5, and the Illinois Waste Management and Research Center (WMRC) pamphlet entitled, "Sustainable Solutions." I provided a brief explanation of WMRC and its services.

During the opening conference, I explained my purpose at Solutia to perform a RCRA CEI. I also questioned Messrs. Fulbright and Talbot on Solutia's current operations, and hazardous waste generation and management activities. The information provided in response is described in Section II of this report.

The opening conference ended at approximately 9:10 A.M.

IV. Visual Site Inspection

Mr. Fulbright accompanied me throughout the visual site inspection.

IV.1. Rubber Intermediates Plant

The visual site inspection began at the area of the plant where the rubber intermediates are manufactured (Rubber Plant). Upon arrival at the Rubber Plant, Mr. Fulbright and I met with two processing engineers, Doug Ziesse and Anthony Ehlen, to discuss the generation of the ketone hazardous waste stream and the hazardous waste storage tank, which is located at the Rubber Plant.

Messrs. Ziesse and Ehlen provided the following information during the interview. In the process of manufacturing the rubber intermediates, a by-product alcohol is generated. As generated, the material contains more ketone than the by-product alcohol. After distillation, the resulting ketone waste is piped to the hazardous waste storage tank. The majority of the ketone present in the waste stream is methyl isobutyl ketone (MIBK), though methyl ethyl ketone (MEK) is also present. The storage tank is also used to store organic waste that is skimmed from wastewaters generated at the facility prior to discharging the wastewater to the sewer.

The hazardous waste storage tank has an approximate 10,000-gallon capacity. Three inlet lines and one vapor recirculation line for output of waste from the storage tank are present in the system. The tank is a fixed-roof tank with a conservation vent, and nitrogen blanket.

Once a month the seals on the pumps ancillary to the tank system are monitored for organic emissions using a photo ionization detector (PID). Valves on the tank system are monitored with a PID once a year. The tank is visually inspected on a daily basis by operators in the area. The ancillary equipment associated with the tank system (pipes, valves, and pumps) contact the waste stream for greater than 300 hours in a calendar year. Messrs. Ziesse and Ehlen believed the storage tank was included in Solutia's Title V Air Permit. Solutia applied for this permit in 1995, and has not yet received the permit.

After this interview, Messrs. Fulbright, Ziesse, Ehlen and I went to the location of the hazardous waste storage tank. The tank is featured in photograph 1. The tank was labeled with the words, "Hazardous Waste," an identification number, and a National Fire Protection Association diamond. No other description of the contents was labeled or otherwise marked on the storage tank.

Secondary containment was provided for the storage tank. I did not observe the presence of any spills within, or damage to the secondary containment. A pump was located outside of the secondary containment for the storage tank, and appeared to be provided with its own containment for spills (concrete pad and curbing). According to the Solutia representatives, the pump is provided with dual mechanical seals and a barrier fluid system.

I noted that the valves were marked with tags that identified them by number. During this portion of the inspection, I again questioned Messrs. Ziesse and Ehlen on the inspection frequency of the tank system. It was again explained that the storage tank was visually inspected each day, and that the pumps and valves were monitored with a PID for organic emissions on a monthly and yearly basis, respectively.

The tank was not marked with an accumulation date. It was explained to me that the daily inspection records record the volume of material in the storage tank, at the beginning and ending of each day, which can be used to track the accumulation time of the waste in the tank. However, the tank is emptied approximately once a month.

I questioned Messrs. Ziesse and Ehlen on the age of the tank. At this time, they were not sure of the exact age, but stated that the tank probably went into RCRA service in 1986 or 1987. However, the tank itself may be older.

We returned to the office area at the Rubber Plant to review the inspection and monitoring records for the tank system. I reviewed the annual PID monitoring records for the valves. Records were present for the years 2002 through 2005. The last inspection recorded in these records dated from November 2005. The records included the following information.

- A reference to a drawing number
- Department where the valve is located
- Valve number
- PID reading (with respect to a reading of 250 ppm)
- Test date
- Initials of operator

I also reviewed the monthly PID monitoring records for the pumps. Inspections at three separate pumps were recorded by these records. The records I reviewed were from the months of January through July, 2006. The records included the following information:

- Department unit number
- Location of the equipment with reference to a drawing number
- Visible leak check
- PID reading
- Leak information
- Whether or not a reading is in excess of 10,000 ppm

I reviewed the daily tank system inspection records for the month of August. These records recorded inspections of the storage tank, ancillary equipment and secondary containment.

After this review, we continued with the site tour of the Rubber Plant. At this time, I observed one 55-gallon container labeled with the words, "Used Oil" (photograph 2). In addition, I observed several 55-gallon containers of spent platinum catalyst. The containers had accumulation dates ranging from April through May, 2006. According to Mr. Fulbright, this material would be recycled. I noted that fire extinguishers, emergency showers, and fire hydrants were present.

IV.2. BBU Building

After touring the Rubber Plant, Mr. Fulbright and I headed in the direction of the BBU Building, which is used to store hazardous and non-hazardous wastes in containers. On our way to this location, we passed through the Finished Goods Tank Farm, Oxidental Chemical Company Manufacturing Unit, and the Maintenance Shop. A 55-gallon container of used oil was present just outside of the Maintenance Shop.

As we continued, we walked through two large warehouses used to store product. The first of these contained large bags of trichloroisocyanuric acid.

At the entrance of the BBU Building, I noted that two emergency showers were present. The inside of the BBU building is separated into two halves, for the storage of hazardous waste and non-hazardous waste respectively. At the time of my inspection, no hazardous waste appeared to be present at the side of the building used for its storage. Only empty containers and various pieces of equipment were present in the area (photograph 3).

At the side of the building used to store non-hazardous waste, I noted that 22 55-gallon containers labeled "Chemical Plant Waste" were present. According to Mr. Fulbright, the waste was not hazardous waste. The containers were marked with accumulation dates that ranged from March through June, 2006.

Also present were approximately 80 to 100 5-gallon pails of investigatory soil sample waste and 36 55-gallon containers of soil waste from a PCB study (photograph 4). The 55-gallon containers were marked with accumulation dates ranging from February through June, 2006. Empty containers were also present in this area.

IV.3. Phosphorus Pentasulfide Plant

Mr. Fulbright and I visited the Phosphorus Pentasulfide Plant. Upon arrival, we met in a conference room with Dennis Litgsinger, a processing engineer at this portion of the facility. At this time, Mr. Litgsinger provided a brief overview of the phosphorus pentasulfide manufacturing process.

Reagent grade phosphorus and sulfur are reacted in a boiler. The resulting liquid product is routed to a condenser. From here, the product is segregated into three separate process lines for solidification and formation of product with differing degrees of reactivity. Subsequently, product from each process line is routed to respective crushing or milling operations, and loaded into railcars or tote bins.

According to Mr. Litgsinger, the wastes generated from the phosphorus pentasulfide process include rinse water from the washing of the product tote bins, and phosphorus pentasulfide cleaned out of the reactor/boiler on an annual basis. The phosphorus pentasulfide clean-out process can generate up to 5000 lbs. of waste. The waste is accumulated in buckets and sent off-site for disposal. Mr. Litgsinger was not sure if the phosphorus pentasulfide waste was hazardous.

Messrs. Litgsinger, Fulbright and I then toured the Phosphorus Pentasulfide Plant. I did not observe any hazardous waste in storage during this portion of the site tour.

The site tour ended at approximately 11:20 P.M.

V. Record Review

The record review portion of the inspection began at approximately 12:30 P.M.

V.1. Hazardous Waste Manifests

I reviewed hazardous waste manifests associated with off-site shipments of hazardous waste in the years 2004 through 2006. Land Disposal Restriction Notification forms were present for each manifest I reviewed.

The hazardous waste streams I identified in the 2006 manifests included the following.

- Paranitroanaline (P077)
- Chlorobenzene (D021)
- Benzene/MEK (D018)
- Waste aerosols (D001)
- Waste paint (D001)
- MIBK (D001)
- Fluorescent bulbs
- PCB contaminated solids (D018)
- Lead and mercury containing solids (D008 and D009)
- Acetone (D001)
- Xylem (D001)
- Phosphorus pentasulfide (D003)
- Hydrogen sulfide (D001)
- Waste sulfur dioxide (D002, D027 and U072)

V.2. Annual Monitoring of Valves Discussion

During the record review portion of the inspection, and earlier during the site tour, I questioned Mr. Fulbright as to why Solutia monitored the valves for the hazardous waste storage tank system on an annual basis as opposed to a monthly basis. I explained that it was my understanding that the applicable regulations required monthly monitoring for equipment leaks from valves.

Mr. Fulbright contacted another Solutia employee to assist in answering this question. After his discussion, Mr. Fulbright explained that Solutia was claiming the exemption under 40 CFR § 265.1057(f), for valves designated for no detectable emissions, that do not have an external actuating mechanism in contact with the hazardous waste stream, and that are monitored annually for organic emissions.

V.3. Waste Determination Records

I reviewed waste determination records dating back to 1999. Waste determination records appear to be kept even in the case of knowledge-based determinations, which provide a brief rational for the decision. The records for the ketone waste stream stored in the hazardous waste storage tank indicated that the determination was based both on knowledge of the waste stream and testing to determine applicable hazardous waste characteristics.

V.4. Hazardous Waste Contingency Plan

A hazardous waste contingency plan was on file. I did not note any deficiencies within its content. However, I noted that the plan still referred to a RCRA treatment tank in the monochlorobenzene department that is no longer in operation.

V.5. Arrangements with Local Authorities

I questioned Mr. Fulbright on Solutia's arrangements with local authorities. In response, Mr. Fulbright explained that on February 2, 2006, Solutia held a training session with the local Police Department, Fire Department and Hazardous Materials Response Team. During this training, an emergency exercise was conducted in response to a mock release of chemicals.

V.6. Training Records

I reviewed documents that listed the job titles, job descriptions, and the names of the persons filling these positions for the positions of Distribution Generalist, Senior Lab Technician, Material Handlers, Unit Controllers and Designated Operators. Records describing a computer-based "RCRA" training were also available for review. Based on the available documentation, the RCRA Training did not appear to include Contingency Plan training.

Records indicating that employees had received the RCRA Training were on-file for the years 2003-2006.

V.7. Inspection Records

I reviewed inspection records for the BBU building for the year 2006. The records indicate that the area is inspected on a weekly basis.

I reviewed the daily inspection logs for the tank system for the year 2006. I noted that none of the 2006 records were complete for the entry that is intended to record the daily starting and ending liquid levels within the tank.

V.8. Annual Report

I reviewed a copy of the 2005 Annual Report to the Illinois Environmental Protection Agency (IEPA). The report appears to have been submitted in February 2006.

VI. Closing Conference

Prior to holding the closing conference, I questioned Mr. Fulbright as to how the accumulation time of hazardous waste in the storage tank was tracked, when none of the daily inspection records I reviewed were completed for the portion that tracked the volume of hazardous waste in the storage tank. In response, Mr. Fulbright could only explain that the storage tank has an organic probe that will shut off the feed at 50% capacity.

Mr. Fulbright also explained to me that he believed the hazardous waste storage tank system was included in Solutia's Title V Air Permit. Mr. Fulbright also clarified that the tank was constructed in 1976.

I explained to Mr. Fulbright that the RCRA training did not include contingency plan training. Mr. Fulbright explained that the contingency plan training was provided separately. The training records are kept on a computer. At this time, Mr. Fulbright was not able to provide me with the records for review as the person with access to these records was no longer available. Mr. Fulbright stated that he could provide me with these records via e-mail.

Mr. Fulbright was not able to provide me with a vapor pressure determination for the hazardous waste storage tank. In addition, Mr. Fulbright was not able to provide me with a list of the valves and pumps associated with the hazardous waste storage tank system that contained all of the following information for those pieces of equipment.

- Equipment identification number and hazardous waste management unit identification
- Approximate locations within the facility
- Type of equipment
- Percent by weight total organics in the hazardous waste stream at the equipment
- Hazardous waste state at the equipment
- Method of compliance with the air emissions standard

At the conclusion of the inspection, Ms. Greta Senn, Plant Manager joined Mr. Fulbright and me for a closing conference. I explained that it was not U.S. EPA policy to determine violations during an inspection. However, I did explain that Solutia had potential record keeping deficiencies with respect to the regulations applicable to the monitoring of organic emissions from the ancillary equipment associated with the hazardous waste tank system.

Prior to leaving Solutia, I obtained photocopies of a Solutia document describing Solutia's training and development for employees, and a report describing an inspection of the hazardous waste tank system conducted by Conam Inspection & Engineering Services, on September 20, 2004.

Attachment A: Photographs taken during CEI.
Attachment B: Inspection Check Lists

Photograph 1: Hazardous waste storage tank at the Rubber Intermediate Manufacturing Plant at Solutia Inc., W.G. Krummrich Plant, Sauget, IL. The tank is used to store an MIBK/MEK containing organic hazardous waste stream. The digital photograph was taken on August 23, 2006, at approximately 9:40 A.M. The photographer was Todd Brown, U.S. EPA. The file name is P8230001.

Photograph 2: Container of Used Oil at the Rubber Intermediate Manufacturing Plant at Solutia Inc., W.G. Krummrich Plant, Sauget, IL. The digital photograph was taken on August 23, 2006, at approximately 10:15 A.M. The photographer was Todd Brown, U.S. EPA. The file name is P8230002.

Photograph 3: Inside of the BBU building at Solutia Inc., W.G. Krummrich Plant, Sauget, IL. The photograph features the side of the building used to store hazardous waste generated by Solutia. The digital photograph was taken on August 23, 2006, at approximately 10:32 A.M. The photographer was Todd Brown, U.S. EPA. The file name is P8230003.

Photograph 4: Inside of the BBU building at Solutia Inc., W.G. Krummrich Plant, Sauget, IL. The photograph features the side of the building used to store non-hazardous waste generated by Solutia. The 5-gallon pails and 55-gallon containers featured in the photograph reportedly contained investigatory soil samples. The digital photograph was taken on August 23, 2006, at approximately 10:39 A.M. The photographer was Todd Brown, U.S. EPA. The file name is P8230004.

ATTACHMENT B. SOLUTIA, INC. 8/23/06

Regulation	RCRA GENERATOR INSPECTION CHECKLIST (PART 722)	Violation
	PART 722: STANDARDS APPLICABLE TO GENERATORS OF HAZARDOUS WASTE (>1000 KG/MO.)	
	SUBPART A: GENERAL	
722.111	**Section 722.111 Hazardous Waste Determination** Has the generator correctly determined if the solid waste(s) it generates is a hazardous waste? Yes ✓ No____ N/A____	722.111
	Have hazardous wastes been identified for purposes of compliance with Part 728? Yes ✓ No____ N/A____	
808.121(a)	Has the generator correctly determined if the solid waste(s) it generates is a special waste? NOT inspected Yes____ No____ N/A____	808.121(a)
	Section 722.112 USEPA Identification Numbers	
722.112(a)	Has the generator obtained a USEPA identification number? Yes ✓ No____ N/A____	722.112(a)
722.112(c)	Has the generator offered its hazardous waste only to transporters or to treatment, storage or disposal facilities that have a USEPA identification number? APPEARS SO. Yes ✓ No____ N/A____	722.112(c)
	SUBPART B: THE MANIFEST	
	Section 722.120 General Requirements	
722.120(a)	Does the facility manifest its waste off-site? Yes ✓ No____ N/A____	
722.120(b)	Does the manifest designate a facility permitted to handle the waste? Yes ✓ No____ N/A____	722.120(a)
722.120(d)	Has the generator shipped any waste that could not be delivered to the designated facility? NOT in manifests reviewed in detail Yes____ No ✓ N/A____	722.120(b)
	Section 722.121 Acquisition of Manifests Has the generator used:	722.120(d)
722.121(a)	- an Illinois manifest for wastes designated to a facility within Illinois? Yes ✓ No____ N/A____	722.121(a)
722.121(b)	- a manifest from the State to which the manifest is designated? Yes ✓ No____ N/A____	
	- an Illinois manifest if the State to which the waste is designated has no manifest of its own? Yes____ No____ N/A ✓	722.121(b)
	Section 722.122 Number of Copies	
722.122	Does the manifest consist of at least 6 copies? Yes ✓ No____ N/A____	722.122
	Section 722.123 Use of the Manifest	
722.123(a)	For each manifest reviewed, has the generator: - signed the certificate by hand? Yes ✓ No____ N/A____	
	- obtained the handwritten signature and the date of acceptance by the initial transporter? Yes ✓ No____ N/A____	722.123(a)
	- retained one copy as required by Section 722.140(a)? Yes ✓ No____ N/A____	
	- apparently sent a copy (part 5 for the Illinois manifest) to the Agency within 2 working days? Yes ✓ No____ N/A____	
722.123(b)	- has the generator apparently given the remaining copies to the transporter? Yes ✓ No____ N/A____	722.123(b)
722.123(c)	- has the generator followed the procedures prescribed in Section 722.123 for manifesting bulk shipments of hazardous waste by rail or water? Yes____ No____ N/A ✓	722.123(c)

JR

Regulation	RCRA GENERATOR INSPECTION CHECKLIST (PART 722)	Violation
	SUBPART C: PRE-TRANSPORT REQUIREMENTS	
	Is there any hazardous waste ready for transport off-site? Yes_____ No✓ N/A_____	
.130	If so, is the generator complying with the pre-transport requirements in Subpart C? Yes_____ No_____ N/A✓	722.130
	Section 722.134 Accumulation Time	
(722.134(a))	Has the generator complied with the following requirements: Yes_____ No✓ N/A_____	
(722.134(a)(1))	A) For waste in containers, has the generator complied with the requirements of Part 725, Subpart I, AA, BB, and CC? Yes✓ No_____ N/A_____	
	and/or	
	B) For waste in tanks, has the generator complied with the requirements of Part 725, Subpart J, AA, BB, and CC (except Sections 725.297(c) and 725.300)? Yes_____ No✓ N/A_____	
	and/or	
	C) For waste on drip pads, has the generator complied with the requirements of Part 725, Subpart W and maintained the required records identified in this subsection? Yes_____ No_____ N/A✓	
	and/or	
	D) For waste in containment buildings, has the generator complied with Part 725, Subpart DD and maintained the required records identified in this subsection? Yes_____ No_____ N/A✓	
(722.134(a)(2))	For waste in containers, has the generator marked and made visible for inspection on each container, the date upon which accumulation began? NOVE on site Yes_____ No_____ N/A✓	
(722.134(a)(3))	For waste in containers and tanks, has the generator marked or labeled each with the words "Hazardous Waste"? NO Containers but tank was labeled Yes✓ No_____ N/A_____	
(722.134(a)(4))	Has the generator complied with the requirements of Part 725, Subparts C and D, and Sections 725.116 and 728.107(a)(4)? LDR on-site Yes✓ No_____ N/A_____	
	Specifically, the requirements of items 1 and/or 4 above (listed by regulation) which need to be complied with are as follows:	
	Does the facility accumulate hazardous waste in containers? Yes✓ No_____ N/A_____	
	If "No", go to Subpart J.	
	SUBPART I: USE AND MANAGEMENT OF CONTAINERS	
	Has the generator closed an accumulation area? Yes_____ No✓ N/A_____	725.211
(725.211) (725.214)	If "Yes", was the accumulation area closed in accordance with Sections 725.211 and 725.214? Yes_____ No_____ N/A✓	725.214
(725.271)	If the containers have leaked or are in poor condition, has the owner/operator transferred the hazardous waste to a suitable container? Yes_____ No_____ N/A✓	
(725.272)	Is the waste compatible with the container and/or liner? NOVE on site Yes_____ No_____ N/A_____	
(725.273(a))	Are containers of hazardous waste always closed except to remove or add waste during accumulation? None on-site Yes_____ No_____ N/A_____	
(725.273(b))	Are containers of hazardous waste being opened, handled, or stored in a manner which will prevent the rupture of the container or prevent it from leaking? None on-site Yes_____ No_____ N/A_____	

Regulation	RCRA GENERATOR INSPECTION CHECKLIST (PART 722)	Violation
(725.274)	Is the owner/operator inspecting the accumulation area(s) at least weekly, looking for leaks or deterioration? Yes ✓ No_____ N/A_____	
	Is the accumulation area free from any evidence of leaking or deteriorating containers? (See also Section 725.131) NONE ON-SITE Yes ✓ No_____ N/A_____	
(725.276)	Are containers holding ignitable or reactive wastes located at least 15 meters (50 feet) from the facility's property line? NONE ON SITE Yes_____ No_____ N/A_____	
	Note: See Section 725.117(a) for additional requirements for ignitable, reactive or incompatible wastes.	
(725.277)	Is the owner/operator complying with the requirements concerning incompatible wastes? Yes_____ No_____ N/A_____	
	COMMENTS: NONE ON-SITE	
	Section 725.278 Air Emission Standards	
(725.278)	Is the owner or operator managiing all hazardous waste placed in containers in accordance with Subparts AA, BB and CC of Part 725? Yes_____ No_____ N/A_____ NONE	
	Comments: ON-SITE	
	Does the generator accumulate and/or treat hazardous waste in tanks? Yes ✓ No_____ N/A_____	
	Note: If "No", go to Subpart C.	
	SUBPART J: TANK SYSTEMS	
	Has the generator closed an accumulation area? Yes_____ No ✓ N/A_____	725.211
(725.211) (725.214)	If "Yes", was the accumulation area closed in accordance with Sections 725.211 and 725.214? Yes_____ No_____ N/A ✓	725.214
(725.290)	Does the facility accumulate or treat hazardous waste in tanks? Yes ✓ No_____ N/A_____	
	Note: A generator may treat hazardous waste in a tank for less than 90 days without a RCRA permit.	
	If "No", skip Subpart J.	
	a) Tank systems that are used to accumulate or treat hazardous waste which contains no free liquids (using the Paint Filter Liquids Test) and that are situated inside a building with an impermeable floor are exempted from the requirements in Section 725.293.	
	b) Tank systems, including sumps, that serve as part of a secondary containment system to collect or contain releases of hazardous wastes are exempted from the requirements in Section 725.293(a).	
	c) Tanks, sumps and other collection devices used in conjunction with drip pads (as defined in Section 720.110) and regulated under Subpart W, must meet the requirements of this Subpart.	

AR

Regulation	RCRA GENERATOR INSPECTION CHECKLIST (PART 722)	Violation
(725.291(a))	For tanks **existing** prior to July 14, 1986 (see definition of tank system under 720.110) and not protected by a secondary containment system, has a written assessment been reviewed and certified by an IRPE(*) in accordance with Section 702.126(d) by January 12, 1988 [except as provided in Section 725.291(c)]? TANK has secondary Containment Yes_____ No_____ N/A ✓	
(725.291(b))	Does this assessment consider at least the following: 1) design standards for the tank and ancillary equipment? Yes_____ No_____ N/A_____ 2) hazardous characteristics of the wastes? Yes_____ No_____ N/A_____ 3) existing corrosion protection measures? Yes_____ No_____ N/A_____ 4) documented age of the tank system? Yes_____ No_____ N/A_____ 5) results of a leak test, internal inspection, or other tank integrity examination? Yes_____ No_____ N/A_____ *IRPE = Independent Registered Professional Engineer	
(725.291(c))	Has a tank system assessment been performed within 12 months after the materials in the tank become a hazardous waste? TANK has Secondary Containment Yes_____ No_____ N/A ✓ **Note:** If an assessment indicates a tank system is leaking or unfit for use, the owner/operator must comply with the requirements of Section 725.291(b)(5).	
(725.292(a))	For **new** tanks (see definition of new tanks under Section 720.110) whose installation commenced after 07/14/86, has a written assessment been reviewed and certified by an IRPE in accordance with Section 702.126(d) prior to operation of the tank system? NOT A NEW TANK Yes_____ No_____ N/A_____ Does the assessment include, at a minimum, the following: 1) design standards for tanks and ancillary equipment? Yes_____ No_____ N/A_____ 2) hazardous characteristics of the waste(s) to be handled? Yes_____ No_____ N/A_____ 3) evaluation of potential for corrosion and corrosion protection measures for tank systems with metal components in contact with soil or water? Yes_____ No_____ N/A_____ 4) design or operational measures that will protect underground tank systems from potential damage resulting from vehicular traffic? Yes_____ No_____ N/A_____ 5) designs to ensure adequate foundations, anchoring to prevent flotation or dislodgment and the ability to withstand the effects of frost heave? Yes_____ No_____ N/A_____	
(725.292(g))	Has the owner/operator obtained and kept on file at the facility the written statements, including the certification statements [as required in Section 702.126(d)] of the design and installation requirements of Subsections (b) through (f)? Yes_____ No_____ N/A_____	

LR

Regulation	RCRA GENERATOR INSPECTION CHECKLIST (PART 722)	Violation
(725.293(a))	Is secondary containment provided for any new tank system before being put into service? Yes____ No____ N/A✓ Does an existing tank, used to accumulate F020, F021, F022, F023, F026 or F027 waste(s), have secondary containment by 1/12/89? Yes____ No____ N/A✓ For an existing tank of documentable age, is secondary containment provided by 1/12/89 or when the tank is 15 years old, whichever is later? Yes✓ No____ N/A____ For an existing tank of undocumentable age, has secondary containment been provided by 1/12/95? Yes✓ No____ N/A____ or if the facility is older than 7 years, by the time the facility reaches 15 years of age or 1/12/89, whichever is later? Yes✓ No____ N/A____ For tanks that accumulate wastes that become hazardous after 1/12/87, has secondary containment been provided within the time intervals required in Subsections (a)(1) through (a)(4) substituting the date that a material becomes a hazardous waste for 1/12/87? Yes____ No____ N/A✓	Not sure yet if tank is new or old
(725.293(b))	Is the secondary containment system designed, installed and operated to prevent migration of wastes or accumulated liquid out of the system at any time? Yes✓ No____ N/A____ Is the secondary containment system capable of detecting and collecting releases and accumulated liquids until the collected material is removed? Yes✓ No____ N/A____	
(725.293(c))	To meet the requirements of Subsection (b), is the secondary containment system: 1) compatible with the waste(s) in the tank and of sufficient strength and thickness to prevent failure? Yes✓ No____ N/A____ 2) placed on a foundation or base capable of providing support, providing resistance to pressure gradients and preventing failure due to settlement, compression of uplift? Yes✓ No____ N/A____ 3) provided with a leak detection system designed and operated to detect any release or accumulated liquid within 24 hours? Yes✓ No____ N/A____ 4) sloped or otherwise designed or operated to drain and remove liquids resulting from leaks, spills or precipitation? Yes✓ No____ N/A____ and is spilled or leaked waste and accumulated precipitation removed from the secondary containment within 24 hours? Yes✓ No____ N/A____ **Note:** A RCRA permit may allow for removal of liquids less frequently than 24 hours after accumulation.	
(725.293(d))	Does the secondary containment for tanks have one or more of the following: 1) a liner (external to the tank); or 2) a vault; or 3) a double-walled tank; or 4) an equivalent device (approved by the Board)? Yes✓ No____ N/A____	
(725.293(e))	Does the external liner system(s), vault system(s) and/or double-walled tank(s) meet the additional requirements identified in Section 725.293(e)? Yes____ No____ N/A____	

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Regulation	RCRA GENERATOR INSPECTION CHECKLIST (PART 722)	Violation
(725.293(f))	Is ancillary equipment protected by secondary containment that meets the requirement of Subsection (h) and (c)? Yes ✓ No____ N/A____ If "No": 1) Is aboveground piping (exclusive of flanges, joints, valves and connections) inspected daily? Yes ✓ No____ N/A____ 2) Are welded flanges, joints and connections inspected daily? Yes ✓ No____ N/A____ 3) Are sealless or magnetic coupling pumps and sealless valves inspected daily? Yes ✓ No____ N/A____ 4) Are pressurized aboveground piping systems with automatic shut-off devices inspected daily? Yes____ No____ N/A ✓	
(725.293(i))	Until such time as secondary containment is provided, are the following requirements being met for all tank systems: 1) For non-enterable underground tanks, has an annual leak test that meets the requirements of 725.291(b)(5) been conducted? Yes____ No____ N/A____ 2) For other than non-enterable underground tanks and ancillary equipment, has an annual leak test, internal inspection or other tank integrity examination by an IRPE been conducted? Yes____ No____ N/A____ 3) Are written records maintained at the facility to document the assessments required under Subsections (i)(1) and (i)(2)? Yes____ No____ N/A ✓ **Note:** If a tank system is found to be leaking or unfit for use as a result of a leak test or assessment, the owner/operator must comply with Section 725.296.	
(725.294(a))	Has the owner/operator placed hazardous wastes or treatment reagents in the tank system that could cause the system to rupture, leak, corrode or otherwise fail? Yes____ No ✓ N/A____	
(725.294(b))	Do tanks and secondary containment have appropriate controls and practices to prevent spills and overflows including: 1) spill prevention controls? Yes ✓ No____ N/A____ 2) overfill prevention controls? Yes ✓ No____ N/A____ 3) sufficient freeboard in uncovered tanks? Yes____ No____ N/A ✓	
(725.294(c))	**Note:** If a leak or spill has occurred in the tank system, the owner/operator shall comply with the requirements of Section 725.296.	
(725.295(a))	Does the owner/operator inspect, if present, at least each operating day, the following: 1) overfill/spill control equipment? Yes ✓ No____ N/A____ 2) the aboveground portion of the tank system for corrosion or releases? Yes ✓ No____ N/A____ 3) data from monitoring equipment? Yes ✓ No____ N/A____ 4) the construction materials and the area immediately surrounding the external portion of the system? Yes ✓ No____ N/A____	
(725.295(b))	If the tank system has cathodic protection, is the owner/operator complying with Section 725.295(b) to ensure that they are functioning properly? Yes____ No____ N/A ✓	
(725.295(c))	Does the owner/operator document in the operating record, the results of tank inspections as required in Section 725.295(a) and (b)? Yes ✓ No____ N/A____	

2B

Regulation	RCRA GENERATOR INSPECTION CHECKLIST (PART 722)	Violation
(725.296)	If the tank system or secondary containment system has a leak or spill or is unfit for use, has the owner/operator: a) immediately ceased using; prevented flow or addition of waste and inspected the system to determine the cause of the release? Yes_____ No_____ N/A_____ b) removed applicable waste from the system within 24 hours of detection? Yes_____ No_____ N/A_____ c) immediately conducted a visual inspection of the release and taken actions to contain visible releases to the environment, prevented further migration to soils or surface water and removed and properly disposed of any contaminated soil or water? Yes_____ No_____ N/A_____	
(725.296(d))	d) notified the Agency within 24 hours of detection of release? Yes_____ No_____ N/A_____ d)3) within 30 days of detection of release, submitted a report to the Agency that complies with the requirements of Section 725.296(d)(3)? Yes_____ No_____ N/A_____ **Note:** Notification and reports are not necessary if less than 1 pound of material is spilled and it was immediately contained and cleaned up.	
(725.296(e))	e) repaired the tank system prior to returning the tank system to service in the event that a leak has occurred from the primary tank system into the secondary containment system? Yes_____ No_____ N/A_____ e)4) provided secondary containment before returning a tank system to service in the event that the release was from a component of a tank system without secondary containment? Yes_____ No_____ N/A_____ e)4) met the requirements for a new tank system in the event that a component is replaced during repair? Yes_____ No_____ N/A_____ e)4) provided the entire component with secondary containment prior to being returned to use in the event that a leak has occurred in any portion of a component that is not readily accessible for visual inspection? Yes_____ No_____ N/A_____	
(725.296(f))	f) In the event that an extensive repair has been conducted in accordance with subsection (e), submitted to the Agency within 7 days after returning the tank system to use, a certification by an IRPE stating that the repaired system is capable of handling hazardous wastes without release for the intended life of the system? Yes_____ No_____ N/A_____ **Note:** If the owner/operator does not satisfy the requirements of subsections (e)(2) through (e)(4), the tank system must be closed in accordance with Section 725.297.	
(725.297(a))	At the time of closure of a tank system, has the owner/operator removed or decontaminated all waste residues, contaminated components, contaminated soils and structures and equipment and managed them as hazardous waste [unless Section 721.103(d) applies]? Yes_____ No_____ N/A_____	
(725.297(a))	Have the closure plan, closure activities, cost estimates for closure and financial responsibility for tank systems met all requirements specified in Subparts G and H? Yes_____ No_____ N/A_____	
(725.297(b))	If the tank system cannot be "clean" closed, has the owner/operator closed the tank system and performed post-closure care in accordance with the closure and post-closure care requirements that apply to landfills (Section 725.410)? Yes_____ No_____ N/A_____ **Note:** Such a tank system is considered a landfill and must meet all of the requirements of landfills specified in Subparts G and H.	

Regulation	RCRA GENERATOR INSPECTION CHECKLIST (PART 722)	Violation

SUBPART C: PREPAREDNESS AND PREVENTION

(725.131)

Is the facility being operated and maintained to minimize the possibility of a fire, explosion or any release of hazardous waste or hazardous waste constituents which could threaten human health or the environment?

Yes ✓ No _____ N/A _____

(725.132)

Is the facility equipped with the following, if necessary:

a) an internal communication or alarm system(s)?
Yes ✓ No _____ N/A _____

b) a telephone or other device to summon emergency assistance from local authorities?
Yes ✓ No _____ N/A _____

c) portable fire extinguishers, fire control equipment, spill control equipment and decontamination equipment?
Yes ✓ No _____ N/A _____

d) water at adequate volume and pressure for fire control?
Yes ✓ No _____ N/A _____

~~A~~ (725.133)

Is the facility testing and maintaining communication/alarm system(s), fire protection equipment, spill control equipment and decontamination equipment?

Yes ✓ No _____ N/A _____

(725.134)

a) Where hazardous waste is being handled, do all employees have immediate access to an internal alarm or other emergency communication device?
Yes ✓ No _____ N/A _____

b) If there is ever just one employee on the premises when the facility is operating, does he/she have immediate access to a device capable of summoning external emergency assistance?
Yes _____ No _____ N/A ✓

(725.135)

Is the facility maintaining adequate aisle space?

Yes ✓ No _____ N/A _____

~~A~~ (725.137)

Has the facility attempted to make the following arrangements, as appropriate, for the type of facility and waste:

- arrangements with local emergency authorities (i.e. police and fire departments, other emergency response agencies) to familiarize them with the layout of the facility, properties of hazardous waste handled, places where facility personnel would be working, entrances to roads inside the facility and evacuation routes?
Yes ✓ No _____ N/A _____
- agreements designating the primary authority where more than one police or fire department might respond?
Yes ✓ No _____ N/A _____
- agreements with State emergency response teams, contractors and equipment suppliers?
Yes ✓ No _____ N/A _____
- arrangements to familiarize local hospitals with the properties of hazardous waste handled at the facility and the type of injuries or illnesses which could result from fires, explosions or releases at the facility?
Yes ✓ No _____ N/A _____

according to Plan & discussions with representatives

SUBPART D: CONTINGENCY PLAN AND EMERGENCY PROCEDURES

(725.151(a))

Is the contingency plan available?

Yes ✓ No _____ N/A _____

If "No", skip to Section 725.155.

Is the plan designed to protect human health and the environment from releases to the air, soil and water?

Yes ✓ No _____ N/A _____

~~A~~ (725.151(b))

Has there been a fire, explosion or release of hazardous waste?

Yes _____ No ✓ N/A _____ not recent

If "Yes", has the contingency plan been carried out immediately?

Yes _____ No _____ N/A ✓

(725.152(a))

Does the plan describe the actions required for response to:

- fires? Yes ✓ No _____ N/A _____
- explosions? Yes ✓ No _____ N/A _____
- releases? Yes ✓ No _____ N/A _____

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Regulation	RCRA GENERATOR INSPECTION CHECKLIST (PART 722)	Violation
(725.152(c))	Does the plan describe arrangements with: - police and fire departments? Yes / No / N/A - hospitals? Yes / No / N/A - contractors? Yes / No / N/A - emergency response teams? Yes / No / N/A	
(725.152(d)	Does the plan contain the current emergency coordinator's name, phone (office and home) and address? Yes / No / N/A	
(725.152(e))	Does the plan identify all emergency equipment including: - description? Yes / No / N/A - capability? Yes / No / N/A - location? Yes / No / N/A Is the list of emergency equipment up-to-date? DO NOT CHECK. Yes / No / N/A	
(725.152(f))	Does the plan include: - an evacuation plan? Yes / No / N/A - an evacuation signal? Yes / No / N/A - alternate evacuation routes? Yes / No / N/A	
(725.153)	Has the contingency plan (including all revisions) been: a) maintained at the facility? Yes / No / N/A b) submitted to: - police department? Yes / No / N/A - fire department? Yes / No / N/A - hospital? Yes / No / N/A - emergency response teams? Yes / No / N/A	according to plan.
(725.154)	Has the contingency plan been reviewed and revised whenever: a) regulations are revised? Yes / No / N/A b) the plan fails in an emergency? Yes / No / N/A c) the facility changes in a way that modifies the emergency response necessary? Yes / No / N/A d) information regarding emergency coordinators changes? Yes / No / N/A e) information regarding equipment changes? Yes / No / N/A	
(725.155)	Is the emergency coordinator on-site or on call at all times? Yes / No / N/A Is the emergency coordinator familiar with all facility activities, wastes, records, layout and contingency plan? Yes / No / N/A Does the emergency coordinator have the authority to commit the resources needed to carry out the actions specified in the contingency plan? Yes / No / N/A	
(725.156)	If the facility has had a release, fire or explosion, have the procedures of this Section been followed regarding assessment, response and reporting? Yes / No / N/A **Note:** If the facility has had a release, explain in detail.	

Regulation	RCRA GENERATOR INSPECTION CHECKLIST (PART 722)	Violation
(725.116(a))	**Section 725.116 Personnel Training** Does the facility have a training program? Yes ✓ No____ N/A____ Have facility personnel successfully completed a program of classroom or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with the requirements of Part 725? APPEARS SO Yes____ No____ N/A____ Is the program directed by a person trained in hazardous waste management procedures? BASED ON DESCRIP. Yes ✓ No____ N/A____ Does the program teach facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed? Based on descrip. Did not see Contingency Plan Yes____ No____ N/A____ Does the program cover, at a minimum: - procedures to familiarize facility personnel with emergency procedures, emergency equipment and emergency systems? Yes ✓ No____ N/A____ - procedures for using, inspecting, repairing and replacing facility emergency and monitoring equipment? Yes ✓ No____ N/A____ - key parameters for automatic waste feed cut-off systems? Yes ✓ No____ N/A____ - communications or alarm systems? Yes ✓ No____ N/A____ - response to fire or explosions? Yes ✓ No____ N/A____ - response to groundwater contamination incidents? not clear if applicable Yes____ No____ N/A____ - shutdown of operations? Yes ✓ No____ N/A____	Not Observed on descript where applicable appears so.
(725.116(b))	Have new employees completed the program within 6 months of the date of employment or assignment to a position requiring them to manage hazardous waste? Yes ✓ No____ N/A____	
(725.116(c))	Have facility personnel received an annual review of the initial training? Yes ✓ No____ N/A____	
(725.116(d))	Are the following documents and records being maintained at the facility: 1) the job title for each position related to hazardous waste management and the name(s) of the employee(s) filling each job? Yes ✓ No____ N/A____ 2) a written job description for each position above, including the requisite skill, education or other qualifications and duties of personnel assigned to each position? Yes ✓ No____ N/A____ 3) a written description of the type and amount of both initial and continuing training that will be given to each person filling a position dealing with hazardous waste management? Yes ✓ No____ N/A____ 4) records documenting that the training or job experience has been given to and completed by facility personnel? Yes ✓ No____ N/A____	
(725.116(e))	Is the facility maintaining training records until closure of the facility and those of former employees for at least 3 years from the last date of employment? Yes ✓ No____ N/A____	

LB

Regulation	RCRA GENERATOR INSPECTION CHECKLIST (PART 722)	Violation
	Section 728.107 Waste Analysis and Recordkeeping	
(728.107(a)(5))	Has the generator who treats a prohibited waste in tanks or containers in order to meet the treatment standards developed and followed a waste analysis plan? Yes_____ No_____ N/A✓	
	Is the plan on-site? Yes_____ No_____ N/A_____	
	Does the plan include a detailed physical and chemical analysis? Yes_____ No_____ N/A_____	
	Has the plan been filed with the Agency at least 30 days prior to commencement of treatment activity? Yes_____ No_____ N/A_____	
	Has the generator submitted the required notification and certification that the waste meets treatment standards when the waste is shipped off-site? Yes_____ No_____ N/A_____	
	Section 722.134 Satellite Accumulation	
722.134(c)	Is the generator who accumulates hazardous waste at or near any point of generation where wastes initially accumulate and which is under the control of the operator of the process generating the waste, limiting such accumulation to 55 gallons of hazardous waste or 1 quart of **acutely** hazardous waste, complying with Sections 725.271, 725.272 and 725.273(a), and marking the containers with the words "Hazardous Waste" or other words identifying the contents? Yes_____ No_____ N/A_____	
	Has the generator who accumulates more than 55 gallons of hazardous waste or 1 quart of **acutely** hazardous waste complied with the requirements of Section 722.134(a) within 3 working days? Yes_____ No_____ N/A_____	
	If there are more than 55 gallons of hazardous waste or 1 quart of **acutely** hazardous waste in the satellite accumulation area, are the containers marked with the date accumulation began? Yes_____ No_____ N/A_____	
	During the 3 day period, is the generator continuing to comply with the requirements of Section 722.134(c)(1) with respect to the excess waste? Yes_____ No_____ N/A_____	
722.134(g)	**Note:** A generator that generates 1,000 kilograms or greater of hazardous waste per calendar month which also generates wastewater treatment sludges from electroplating operations that meet the listing description for the hazardous waste code F006 may have alternate accumulation requirements if the conditions of 722.134(g), (h), or (i) are fulfilled.	
	SUBPART D: RECORDKEEPING AND REPORTING	
	Section 722.140 Recordkeeping	
722.140(a)	Has the generator retained for a period of 3 years: - a copy of each signed manifest? Yes✓ No_____ N/A_____	722.140(a)
722.140(b)	Has the generator retained a copy of each Annual Report and Exception Report for a period of at least three years from the due date of the report (March 1)? Yes✓ No_____ N/A_____	722.140(b)
722.140(c)	Has the generator retained for a period of 3 years: - copies of test results, waste analyses or other determinations made in accordance with Section 722.111? Yes✓ No_____ N/A_____	722.140(c)
722.140(d)	Does a generator who is involved in any unresolved enforcement action or as requested by the Director continue to maintain the records required in subsections a) and c)? Yes_____ No_____ N/A✓	722.140(d)
	Section 722.141 Annual Reporting	
722.141(a)	Has the generator who ships hazardous waste off-site for treatment, storage or disposal filed an annual report with the Agency by March 1 for the preceding calendar year? Yes✓ No_____ N/A_____	722.141(a)
	Note: If "No", or if deficiencies are noted with the annual report reviewed, contact the Planning and Reporting Section.	

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Regulation	RCRA GENERATOR INSPECTION CHECKLIST (PART 722)	Violation
722.141(b)	Has the generator who treats, stores or disposes of hazardous waste on-site, filed an annual report with the Agency by March 1 for the preceding calendar year? Yes_____ No_____ N/A✓	722.141(b)
	Section 722.142 Exception Reporting	
722.142(a)(1)	If the generator has not received a copy of the manifest from the TSD facility within 35 days of the date of delivery to the transporter, has the generator contacted the transporter or the TSD facility to determine the status of the hazardous waste? Yes_____ No_____ N/A|	722.142(a)(1)
722.142(a)(2)	If the generator has not received a copy of the signed manifest within 45 days of the date of delivery to the transporter, has he filed an exception report with the Agency in accordance with the requirements of this Section? Yes_____ No_____ N/A|	722.142(a)(2)
722.143	**Section 722.143 Additional Reporting** Has the generator furnished additional reports as required by the Director? Yes_____ No_____ N/A|	722.143
	SUBPART E: EXPORTS OF HAZARDOUS WASTE	
722.150	Is the generator an exporter of hazardous waste? Yes_____ No_____ N/A| If "Yes", has the generator complied with the requirements of Subpart E? Yes_____ No_____ N/A|	722.150
	SUBPART F: IMPORTS OF HAZARDOUS WASTE	
722.160	Is the generator an importer of hazardous waste? Yes_____ No_____ N/A| If "Yes", has the generator complied with the requirements of Subpart F? Yes_____ No_____ N/A|	722.160
	SUBPART G: FARMERS	
722.170	Is the generator a farmer? Yes_____ No_____ N/A| If "Yes", has the generator complied with the requirements of Subpart G? Yes_____ No_____ N/A|	722.170
	COMMENTS:	

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